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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,401	01/18/2002	Robert Wayne Glenn JR.	8401	9592

27752 7590 10/06/2006

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EXAMINER
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CHANNAVAJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/051,401		GLENN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Lakshmi S. Channavajjala		1615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-30 and 33-42 is/are pending in the application.
- 4a) Of the above claim(s) 12-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 33-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Receipt of amendment and remarks dated 5-22-06 and 7-14-06 is acknowledged.

Claims 1-7 and 31-32 have been canceled. New claims 33-42 have been added. Claims 12-30 have been withdrawn as being non-elected. Claims 8-11 and 33-42 have been examined.

The following rejections of record have been maintained:

#### ***Double Patenting***

1. **Claims 8-11 and 33-42 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,703,007.** Although the conflicting claims are not identical, they are not patentably distinct from each other. Instant claims are directed to an anhydrous composition comprising a reactive agent comprising a reactive group chemically bonded to a cosmetically active functional group and a solvent in which the reactive agent is miscible. Instant reactive agent is selected from a group consisting of electrophilic group, nucleophilic group and protected thiol group. The "cosmetically active functional group" of the instant claims is defined as a moiety that imparts one or more cosmetic benefits to hair or skin and includes cosmetic agents such as hair conditioning or other hair care agents. Patented claims are directed to a hair composition comprising a protected nucleophilic compound and a carrier, and the composition does not contain water. The nucleophilic compound of the patented claims read on the claimed reactive agents, both nucleophilic and protected thiol groups, and the R group of the patented nucleophilic compound read on the cosmetically active functional group. The

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composition of the patented claims does not contain water and hence meet the “anhydrous” limitation. The patented claims recite a “topical vehicle” and describe solvents such as those claimed as suitable topical vehicles. While the patented claims do not teach anhydrous composition, the claims also do not recite water and accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the nucleophilic compounds of '007 as molecular hooks for various cosmetically active groups in cosmetic compounds and employ the solvents of '007 as carriers, in the presence or absence of water, because '007 teaches that the compounds acts as hooks for efficient and beneficial delivery of cosmetic actives.

**Claims 8-11 and 33-42 are directed to an invention not patentably distinct from claims 1-19 of commonly assigned US 6,703,007. Specifically, as explained above, the above patent discloses the subject matter of the instant claims.**

**2. Claims 8-11 and 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,087,733 in view of US 6,703,007.**

Deppert teaches hair-conditioning compositions containing sulfur containing quaternary ammonium compounds such as sulfhydryl, dithio, isothiuronium compounds that react with the anionic charge carried on the keratin of human hair fibers. In particular, after treating with thioglycolic acid (for permanent waving of hair), free mercaptan groups formed due to reduction of thioglycolic acid are remained on the hair fibers. The thiol containing quaternary compounds of Deppert reacts covalently with

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the free mercaptan groups, thus binding the conditioner to the hair for a longer period of time (col. 8, lines 8-20). The sulfur containing compounds of Deppert read on the instant electrophilic, nucleophilic and protected thiol groups because claim 5 recites isothiuroniums (electrophilic), claim 6 recites thiol containing quaternary ammonium compounds and further, claim 8 recites that the protecting groups include electrophilic as well as phosphorus (nucleophilic) groups. Accordingly, Deppert suggests the claimed reactive agents. Deppert fails to teach anhydrous compositions.

'007, discussed in detail in the preceding paragraphs, teach nucleophilic compounds as reactive agents, which encompass the claimed protected thiol groups because the "Nu" variable in R-(Nu-Pr)<sub>m</sub>, can be a sulfur. '007 teach the reactive groups binding hair cosmetic compounds such as silicon compounds (col. 9) along with other cosmetic compounds. '007 teach the claimed solvents and also state that the vehicles of the composition can be other than water, suggesting anhydrous compositions. In this regard, '007 specifically teach the same solvents that are claimed in the instant (col. 12, lines 55-col. 13, lines 3). Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to choose from the suitable solvents for reactive hooks of Deppert, depending on the cosmetic active group, by selecting from the solvents of '007 so to prepare anhydrous compositions because '007 also teaches reactive hooks for delivering cosmetic compounds and also teaches that cosmetic compounds bound to reactive hooks so as impart the durable and stable benefits of the active agents via the molecular hooks to the skin or hair.

***Response to Arguments***

In their response dated 5-22-06, applicants merely state that the references relied by the examiner failed to teach the claimed invention, without providing any explanation. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Hence the rejections have been maintained.

The following is a new rejection of record:

***Double Patenting***

3. **Claims 8-11 and 33-42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,989,149 or claims 1-21 of U.S. Patent No. 6,991,781 in view of US 6,989,149.** Although the conflicting claims are not identical, they are not patentably distinct from each other. Instant claims are directed to an anhydrous composition comprising a reactive agent comprising a reactive group and a solvent in which the reactive agent is miscible, wherein the anhydrous composition is one part of the final two-part composition. 6,989,149 teaches a two component composition, wherein one part is an anhydrous composition that comprises a reactive agent and a solvent. The patented reactive agent is selected from a group consisting of electrophilic group, nucleophilic group and protected thiol group, which include the claimed specific reactive

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groups because the patent also claims same reactive groups in the dependent claims.

Therefore, 6,989,149 anticipate instant claims.

U.S. Patent No. 6,991,781 claims a composition comprising the reactive agents and solvents of the instant composition. Although U.S. Patent No. 6,991,781 claims the same reactive agents and solvents claimed in the instant invention, the patented claims recite a composition comprising the reactive agent, solvent and an aqueous phase. US 6,989,149 discussed above the same anhydrous compositions such as the instant in two different phases. Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to prepare anhydrous compositions containing a reactive agent and a solvent and pack separately from the aqueous phase or prepare a composition in which both the anhydrous and aqueous phases are mixed, and still provide effective treatment for hair because both the patents employ the reactive agent containing compositions for treating hair to provide hair benefits.

**4. Claims 8-11 and 33-42 are directed to an invention not patentably distinct from claims of commonly assigned U.S. Patent No. 6,989,149 or U.S. Patent No. 6,991,781.**

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned patents, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting

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inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

**5. Claims 8-11 and 33-42 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,989,149 ('149).**

The applied references have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the



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application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

US patent '149 teaches the claimed reactive agents with a reactive group that is chemically bonded to a cosmetically active agent. The description of reactive compounds of '149 includes the claimed compounds (col. 4-col. 8) and also cosmetic active of the instant invention (col. 8). Among the topical vehicles, '149 specifically teach the same solvents that are claimed in the instant (col. 12). Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the compositions comprising reactive agents and solvents, and mix them together with the aqueous compositions and employ them for hair care because '149 also teaches the compounds containing the cosmetic moieties for the same purposes i.e., durable cosmetic benefits that are resistant to cleansing or washing or shampooing.

Examiner notes that instant specification recites a number of U.S. patent applications. It is suggested that the status of the applications be updated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Lakshmi S Channavajjala", with a horizontal line drawn underneath it.

Lakshmi S Channavajjala  
Examiner  
Art Unit 1615  
October 2, 2006